An International Approach to Monitoring, Intercepting, and Managing Radioactively Contaminated Scrap Metal

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The international metal processing industries are very concerned about the importation of scrap metal contaminated with radioactivity. Scrap metal is one of the most actively traded commodities with over 370 million tons of scrap metal consumed worldwide in 2001. Records show that in North America, through 2001, there were over 4,000 detections of radioactivity in scrap metal. Worldwide, there have been 40 deaths and 266 serious injuries due to radioactive source incidents. There has been no coordinated effort by countries to consider harmonized standards and procedures that would facilitate the international transport and trade of radiationfree scrap metal. The U.S. EPA, in partnership with the United National Economic Commission for Europe (UNECE), convened a Group of Experts meeting in April, 2004 to explore the development of an internationally acceptable scrap metal monitoring protocol. Also participating in this effort were representatives from the U.S. scrap metal industry and Argonne National Laboratory, both of whom have supported the U.S. EPA's efforts in this area for many years. Prior to the meeting, a questionnaire was sent to all UNECE member countries, as well as other interested entities. The response to the questionnaire was overwhelming, with information from 45 countries being collected, providing for the first ever a compilation of data on the current status of national regulatory mechanisms, monitoring protocol, handling of found radioactive materials, contractual and reporting requirements. Based on this information, the UNECE Group of Experts developed a list of 10 actions that need to be taken at the national and international levels. The Group of Experts confirmed a commitment to proceed with the development of an internationally acceptable scrap metal monitoring protocol for radiation and a web portal for sharing of information relating to incidents, trends and implementation of the protocol. A third major component of this project, to be developed upon completion of the protocol, will be to develop training programs to insure proper use of the protocol. These tools will greatly increase the safety of internationally traded scrap metal in the global market, without impeding commerce.